

Tom Harkin: Renewable Energy Pioneer

“By turning our focus to home-grown, renewable sources of energy, we reduce the cost for energy consumers and provide a spark to rural economies.” – Senator Tom Harkin (D-IA), April 6, 2005

Throughout his 40 year career in Congress Tom Harkin has had a vision for transforming our energy economy from one that continues an outdated reliance on fossil fuels to one that focuses on increasing efficiency and developing renewable energy resources. Under Harkin’s leadership, the 2002 farm bill was the first farm bill ever to include an energy title, a source of innovative policies to develop and promote the use of biofuels, biobased products, renewable energy, and energy efficiency programs. Harkin continued this work by including \$1.1 billion in the energy title of the 2008 farm bill, and by working with his colleagues to ensure that the final 2013 farm bill energy title included an additional \$700 million. **In total, due to Harkin’s work, more than \$2.4 billion was provided for renewable energy and energy efficiency projects between 2002 and 2014.**



Senator Harkin has consistently pushed for more efficient cars and energy efficient technology for household appliances, buildings, and lighting. Harkin has placed a heavy emphasis on the critical role that bioenergy can play and has been a strong advocate of tapping America’s agricultural productivity to create more biofuels, biobased products, and biopower options. He has also worked to promote the widespread development and use of renewable energy technologies including wind, solar, geothermal and hydropower, both in Iowa and around the country.

Rural Energy for America Program (REAP):

As part of the first-ever energy title in the 2002 farm bill, Harkin authored a new program to support the installation of renewable energy systems or adoption of energy efficiency improvements by farmers, ranchers, and rural small businesses. **The Rural Energy for America Program (REAP) was expanded in the 2008 farm bill, and has now provided \$725 million in federal investments that support more than 10,000 projects nationwide, including more than 1,500 in Iowa.** Because of cost-sharing by recipients, every dollar of federal investment expended through REAP has leveraged an additional three dollars in clean energy investments.

Biofuels:

During the farm crisis of the 1980’s Harkin recognized that our farmers and rural communities could help reduce our dangerous dependence on imported oil by producing biofuels from corn and soybeans. He successfully sponsored legislation to **waive federal fuel taxes on gasoline blended with 10 percent ethanol**. He promoted requirements for use of alternative fuels in federal vehicle fleets in the *Energy Policy Act of 1992*. In 1990, he successfully cosponsored an amendment to the *Clean Air Act* that required the use of oxygenated fuels such as ethanol-blended gasoline to reduce toxic auto emissions. When soil and water contamination began to result from the use of petroleum-derived MTBE as a gasoline oxygenate, he pushed for federal legislation to ban its use. In 2005, Harkin joined with former Senator Lugar (R-IN) to include the **Renewable Fuel Standard** – a mandate requiring increasing usage of biofuels in transportation fuels – in the *Energy Policy Act*. The RFS was

successfully expanded in the 2007 *Energy Independence and Security Act* and continues to be a critical policy for limiting oil imports and reducing air pollution.

As a consequence of these many actions, **ethanol now displaces about 10 percent of the nation's gasoline demand.** This is equivalent to displacing all of our oil imports from Iraq, Kuwait, and Mexico combined. **And due in part to Harkin's efforts, Iowa leads the nation in biofuels production, with 42 ethanol plants and 12 biodiesel plants supporting about 70,000 jobs across the state.**

Advanced Biofuels Research and Development:

Recognizing the potential for production of biofuels from non-grain feedstocks such as crop residues, switchgrass, and woody materials, Harkin teamed up with former Senator Lugar (R-IN) to introduce the ***Biomass Research and Development Act in 2000***. Harkin used the new energy title of the farm bill in both 2002 and 2008 to extend this program to support research and development of advanced biofuels and biobased products.

Harkin also included the **Biorefinery Assistance Program** in the energy title of the 2008 farm bill to support construction of biorefineries for advanced biofuels in rural communities. With three advanced biorefineries nearing completion, Iowa is in the forefront for production of advanced biofuels.

Bioenergy and Biobased Products:

As part of his ongoing efforts to identify new markets for agriculture products, Harkin authored an energy title provision in the farm bill of 2002 to expand the use of bio-based products by requiring their purchase by federal agencies. He also authored a provision establishing a **BioPreferred labeling program** to inform consumers about which products are certified as made primarily from bio-based materials such as resins made from corn or soybeans.

Harkin has brought significant federal bioenergy research dollars to Iowa including \$8.9 million for the establishment of the National Ag-Based Lubricants laboratory at the University of Northern Iowa, \$500,000 for the BioCentury Farm for research on biomass feedstocks production, harvest, and processing at Iowa State University, and \$1.7 million for the Fuels Testing Laboratory at Iowa Central Community College.

Wind Power:

Harkin joined the push to provide a production tax credit for windpower in 1992, and has been an outspoken proponent for its continuation ever since. In 2000, he requested a Government Accountability Office study that documented that tax subsidies for the oil and gas industry had far exceeded those for renewable energy systems. Recognizing the rapidly growing need for windfarm operations and maintenance training, Harkin secured nearly \$900,000 in federal dollars to support the development of a Wind Energy and Turbine Technology program at Iowa Lakes Community College. Today, **Iowa derives more than 25 percent of its electricity from wind. Iowa's wind energy industry includes 15 windpower manufacturing facilities and supports about 7,000 jobs in the state.**

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